

BIGELOW'S "AMERICAN MEDICAL BOTANY"

GÜNTHER BUCHHEIM

AMERICAN MEDICAL BOTANY by Jacob Bigelow (1787–1879) is a three-volume work in which 60 species of American medicinal plants are described and illustrated. Its publication dates are usually given as "1817–1820." These are the inclusive title-page dates of the volumes: vol. 1 is dated 1817, vol. 2: 1818, vol. 3: 1820. However, this work was originally published in six parts, and not in volumes: two parts forming each volume. With the exception of volume 1 part 1, the other five parts are provided with part titles, each being an integral part of the first gathering of each part. These part titles are in the form of a half title and are undated, thus they are of no value in elucidating the dates of publication. The copy of this work in the Duke University, Medical Center Library, Trent Collection, at Durham, North Carolina (NcD–MC) was loaned to the Hunt Botanical Library for this study through the kindness of Dr. G. S. T. Cavanagh, librarian. This copy is distinctive in that the six parts are preserved in their original green boards, and with the paper untrimmed; features that proved to be of high bibliographical importance, especially for determination of dates, collation, and paper size.

The outside front covers give the title as

AMERICAN | MEDICAL BOTANY | WITH | COLOURED ENGRAVINGS.
| BY JACOB BIGELOW, M.D. | Member of the American Academy of Arts
and Sciences; of the American Philosophical | Society, &c. Rumford Professor
and Lecturer on Materia Medica and | Botany in Harvard University.

After the volume and part number, there follows enumeration of the plants described in each part (10 species), together with the plate numbers. The place of publication, and name of publisher and printer, is the same as on the title-pages. Significantly, the dates imprinted on each cover differ from those on the title-pages. Although Graesse, *Trésor de livres rares et précieux* 1: 424. 1950 [reprint], Jackson, *Guide to the literature of botany* p. 360. 1881, and Savage (Comp.), *Catalogue of the printed books and pamphlets in the library of the Linnean Society of London* ed. 2, p. 67. 1925, list the correct inclusive dates (1817–1821), no reference is known which gives the correct publication dates of all the parts.

The dates recorded on the front boards are: Vol. I. Part I: 1817; Vol. I. Part II: 1818; Vol. II. Part I: 1819; Vol. II. Part II: 1819; Vol. III. Part I: 1820; Vol. III. Part II: 1821. In conclusion, volume 1 was published in 1817–1818 (title-page dated 1817), volume 2 in 1819 (title-page dated 1818), and volume 3 in 1820–21 (title-page dated 1820).

Additionally, a printed text is on the outside back covers of the parts belonging to volumes 1 and 2. That on volume 1, part 1 is an announce-

ment by the publisher that part 2 of the same volume will shortly be published, followed by an advertisement of books, none of them botanical. Volume 1, part 2 represents a prospectus of the present work. It is dated May 1818 and states that "Two half volumes are already published." Volume 2, part 1 bears advertisements of books either published by Cummings and Hilliard, or which are in the press. The first item mentioned is AMERICAN MEDICAL BOTANY, Nos. 1, 2, & 3. That for Volume 2, part 2, reports an error on the front cover of Volume 2, part 1, where the plate numbers are reported as "I, II" etc. instead of "XXI, XXII" etc. It reports further that a work titled *Outlines of Botany . . .* by John Locke is in press [this work was published in 1819] and lists additional nonbotanical titles.

Using these data, and considering the contents and bibliographical characteristics of both the NcD-MC and HBL copies, the following formal treatment has been prepared:

American medical botany. 3 vols. Boston, 1817-1820 [1817-1821].

AMERICAN | MEDICAL BOTANY, | BEING A COLLECTION | OF THE |
NATIVE MEDICINAL PLANTS | OF THE | UNITED STATES, | CON-
TAINING THEIR | BOTANICAL HISTORY AND CHEMICAL ANALYSIS,
| AND PROPERTIES AND USES | IN | MEDICINE, DIET AND THE
ARTS, | WITH | COLOURED ENGRAVINGS. | [very short thick-thin
double rule] | BY JACOB BIGELOW, M.D. | RUMFORD PROFESSOR
AND LECTURER ON MATERIA MEDICA AND BOTANY | IN HAR-
VARD UNIVERSITY. | [very short thin-thick double rule] | VOL. I. | [5
dots in line] | BOSTON: | PUBLISHED BY CUMMINGS AND HILLIARD,
AT THE | BOSTON BOOKSTORE, NO. 1, CORNHILL. | ***** | UNI-
VERSITY PRESS HILLIARD AND METCALF. | 1817.

[Vol. II]: . . . | VOL. II. | . . . | BOSTON BOOKSTORE, NO. 1 CORN-
HILL | . . . | 1818.

[Vol. III]: . . . | MEDICINE, DIET, AND THE ARTS, | WITH |
COLOURED ENGRAVINGS, | [short double rule] | BY JACOB BIGELOW,
M.D. | RUMFORD PROFESSOR, AND PROFESSOR OF MATERIA MEDI-
CA IN HARVARD UNIVERSITY. | [short double rule] | VOL. III. | [short
thick-thin double rule] | BOSTON: | PUBLISHED BY CUMMINGS AND
HILLIARD, AT THE BOSTON | BOOKSTORE, NO. 1 CORNHILL. | [very
short double rule] | UNIV. PRESS HILLIARD AND METCALF. |
1820.

COLLATION: 8° in 4's: Vol. 1: 1⁴ 2² 3-14⁴ (—14₄) 15⁴ 16-25⁴; i-v vi-xi xii 17 18-32 33
34-38 39 40-51 52 53-59 60 61-65 66 67-74 75 76-83 84 85-89 90 91-95 96 97-110
111-113 114-124 125 126-132 133 134-141 142 143-148 149 150-154 155 156-160 161
162-168 169 170-176 177 178-186 187 188-191 192 193-197 198.

Vol. 2: 1⁴ 2-13⁴ 14⁴ 15-25⁴; i-v vi-vii viii-ix x-xiii xiv (in NcD-MC copy as "xvi")
15 16-26 27 28-33 34 35-40 41 42-50 51 52-58 59 60-66 67 68-72 73 74-81 82 83-96
97 98-104 105-107 108-114 115 116-120 121 122-136 137 138-141 142 143-147 148
149-153 154 155-159 160 161-165 166 167-170 171 172-187 188 189-199 200.

Vol. 3: 1⁴ 2-12⁴ 13² (—13₂) 14⁴ 15-25⁴ 26²; i-v vi-x 11 12-18 19 20-31 32 33-42 43

44-48 49 50-54 55 56-60 61 62-75 76 77-81 82 83-91 92 93-98 99-101 102-106 107
108-118 119 120-128 129 130-133 134 135-140 141 142-146 147 148-150 151 152-
155 156 157-162 163 164-173 174-175 176-177 178-179 180-187 188-189 190 191
192-193 194-195 196-197 198.

CONTENTS: Vol. 1: 1₁r title, 1₁v registration certification for vol. 1, dated 18 October 1817. 1₂r dedication to Reverend John Thornton Kirkland (1770-1840), president of Harvard University, Cambridge, Mass., dated "Boston, October, 1817," 1₂v □. 1₃-2₂r preface. 2₂v □. 3₁-14₃ text: description of species and their medical uses, including botanical and medical references and explanation of the figures depicted on each plate. 15₁r part title for vol. 1 part 2, 15₁v □. 15₂-25₁r continuation of the text. 25₁v-25₄r notes. 25₄v contents of vol. 1.

Vol. 2: 1₁r part title for vol. 2 part 1. 1₁v □. 1₂r title, 1₂v registration certification for vol. 2, dated 28 October 1818. 1₃-1₄r advertisement by the author. 1₄v □. 2₁-2₃ preface. 2₄-13₄ text. 14₁r part title for vol. 2 part 2, 14₁v □. 14₂-24₂r continuation of the text. 24₂v-25₄r notes. 25₄v contents of vol. 2.

Vol. 3: 1₁r part title for vol. 3 part 1, 1₁v □. 1₂r title, 1₂v □. 1₃-2₁ preface. 2₂-13₁ text. 14₁r part title for vol. 3 part 2. 14₁v □. 14₂-23₂r continuation of the text. 23₂v □. 23₃-23₄r notes. 23₄v □. 24₁-25₁r appendix. 25₁v □. 25₂rv systematic index. 25₃-25₄r index of Latin names. 25₄v □. 26₁-26₂r index of English names. 26₂v contents of vol. 3.

Running titles vary with the plants described, the Latin binomial being used on the versos, the English name on the rectos. Language used: English.

PLATES: 60 colored (colorprinted and handcolored) or partly colored, mixed intaglio plates (engraving, aquatint, stipple engraving) of medicinal plants, numbered I-LX (XIX as "XI"), titled binomially at foot; 207 × 136 mm. (pl. 2); plates facing descriptions; indexed by Stapf, *Index londinensis* (pl. 14, *Spigelia marilandica*, erroneously stated to be in black and white).

ILLUSTRATORS:

Artist: the author, Jacob Bigelow. All plates unsigned. However, in the work itself (Vol. 1, p. xi; Vol. 2, p. vi) it is clearly stated that the figures have been prepared from original drawings made by the author himself, "with the exception of two or three presented by his friends" (Vol. 2: p. vi).

Engravers: Annin, W. B. (dates unknown): 2 plates, and additionally 23 (or 21) plates in collaboration with Smith; Smith, ——— (dates unknown): 23 (or 21) plates, all in collaboration with W. B. Annin. 35 (or 37) plates without indication of engraver (pls. 2-6, 8-28, 30, 41, 43-49; also pls. 31 and 58 in NcD-MC copy).

PAPER: Halfsheets; size of halfsheet 358 × 530 mm. [NcD-MC, untrimmed]; white, wove. Plates: white, wove.

PRINTER: The firm of Hilliard and Metcalf, owner of University Press, Cambridge, Mass.

PUBLISHER: Cummings and Hilliard, Boston booksellers.

DATES OF PUBLICATION: The work was published in 6 parts. Vol. 1, part 1, pp.

i-xii, 17-110, pls. I-X: 1817 (November or late in October). Vol. 1, part 2, pp. 111-198, pls. XI-XX: 1818 (May). Vol. 2, part 1, pp. i-xiv, 15-104, pls. XXI-XXX: 1819 (early in the year, no later than March). Vol. 2, part 2, pp. 105-200, pls. XXXI-XL. 1819 (before December). Vol. 3, part 1, pp. i-x, 11-98 pls. XLI-L: 1820. Vol. 3, part 2, pp. 99-198, pls. LI-LX. 1821 (January).

Supporting evidence: A) Prepublication announcements in *Portico (Baltimore)* 4(1/2): 131. 1817 [July/Aug.] ("in press") and in *N. Amer. Rev. Misc. J.* 5(15): 434. 1817 [Sept.] ("about to be published"). B) Registration certification on the verso of the title-pages of vols. 1 and 2 (18 Oct. 1817; 28 Oct. 1818). C) Prospectus dated May 1818 on outside back cover of vol. 1, part 2; year date 1819 on front cover of vol. 2, part 1 (NcD-MC copy). D) Publication announcements in *N. Amer. Rev. Misc. J.* 6(16): 145-146. 1818 [Nov. 1817] (Vol. 1, part 1 "just issued"); *Amer. Monthly Mag. Crit. Rev.* 4(50): 388. 1818 [Mar. 1819] (Vol. 2, part 1); *Med. Chir. Zeitung* 1819. IV(97): 293-295. 1819 [6 Dec.] (Vol. 2, part 2); *N. Amer. Rev. Misc. J.* 12(30): 230-231. 1821 [Jan.] (Vol. 3, part 2). No announcement for vol. 3, part 1 and published in 1820 has been yet found by the present author; the earliest seen for this part is in *N. Amer. Rev. Misc. J.* 12(30): 230-231. 1821 [Jan.].

REVIEWS: *Analectic Mag.* 11(1): 1-9. 1818 [Jan.]. — *New England J. Med. Surg.* 7(1): 61-70. 1818 [Jan.]; 10(2): 157-166. 1821 [Apr.]. — *N. Amer. Rev. Misc. J.* 6(18): 344-368. 1818 [Mar.]; 9(24): 23-26. 1819 [June]. — *Ecl. Repert.* 8(4): 487-497. 1818 [Oct.]. — *Med.-Chir. Zeitung* 1818.IV(89): 161-163. 1818 [5 Nov.]; 1819.III(60): 140-143. 1819 [29 July]; 1819.IV(97): 293-295. 1819 [6 Dec.]. — *Gött. Gel. Anz.* 1819.III(144/145): 1433-1444. 1819 [9 Sept.]; 1820.II(111): 1111-1112. 1820 [10 July]; 1823.II(113): 1121-1126. 1823 [17 July]. — *Neue Entdeck. Pflanzenk.* 1: 386-393. 1820. — *N. Amer. Rev.* 13(32): 100-134. 1821 [July]. — *London Med. Phys. J.* 47(277): 242-244. 1822 [Mar.]. — *Allg. Lit.-Zeitung (Halle & Leipzig)* 1822.IV(36): 281-284. 1822 [Mar.]. — *Bull. Sci. Nat. Géol.* 3([9]): 59. 1824 [Sept.]. — *Bull. Sci. Méd. (Paris)* 3([9]): 69-75. 1824 [Sept.]. — *Boston Med. Surg. J.* 20(26): 412. 1839 [7 Aug.].

VARIANTS: Two states of leaf 2_s of volume 2 are known, differing only in the pagination of the verso: xvi [misprint for xiv] and xiv [correct pagination]. The original incorrect pagination occurs in the NcD-MC copy, the corrected version e.g. in the HBL copy.

COPIES STUDIED: HBL, NcD-MC; other copies known: AzU, BM, BMNH, CaBVaU, CSfA, CSmH, CSt, CtHT, DLC, DLNM, E-UL, FU, G, GOET-UB, GRO-UB, IaAS, IaDaM, ICF, ICJ, IEN-M, In, InNd, K, KyLxT, KyU, LE (vol. 2, part 1 only), Linn., LNT-M, MB, MBAt, MBC, MBHo, MBM, MdBM, MdBP, MeBat, MH-A (Harv. Herb. Libr.), MH-M, MiEM, MiU, MnS, MSaP, MWA, MWCH, MWiW, NB, NBLiHi, NBMS, NcAS, NcD, NcU, Nh, NhM, NjP, NN, NNA, NNNAM, NNS, NRU, NYBG, OC, OC1GC, OKU, OO, OrU, PPA, PPAP, PPC, PPF, PPH, PPHor, PPL-R, PU, RPB, RPM, ScCMu, ScU, TNV, ViRMC, ViU, ViW, VtU, W (vol. 1 only), WIS-R. — US library holdings according to NUC (The National Union Catalog. Pre-1956 imprints) 57: 283. 1969, and Shaw and Shoemaker (American Bibliography) 1817: 44. 1963.

NOTES: The continuous sequence of roman and arabic page numbers is worth being mentioned. The gap in pagination in volume 1 (pp. xiii-xvi are lacking) proves that the preliminaries were printed later than the text proper and that the original estimate of 16 preliminary pages was not realistic.

Leaves 14₄ of vol. 1 and 13₂ of volume 3, both blank, are present in the NcD-MC copy. The pagination, however, indicates that these blank leaves were intended to be cut out, as was done in the HBL copy.

The wrong folding of gathering 1 of volume 2 in the NcD-MC copy results in the following irregular arrangement: 1₂ 1₁ 1₄ 1₃; iii-iv i-ii vii viii v vi.

In volumes 2 and 3 of the HBL copy the part titles for part 1 are inserted at the wrong places:

Vol. 2: 1₂-1₄ 2₁-2₃ 1₁ 2₄; iii-v vi-vii viii-ix x-xiv i-ii 15 16.

Vol. 3: 1₂-1₄ 2₁ 1₁ 2₂-2₄; iii-v vi-x i-ii 11 12-16.

This work is considered Bigelow's most important contribution to medical botany. It is outstanding for the mixed intaglio processes used for the preparation of the copper plates, being a combination of engraving and aquatint and sometimes stipple engraving. Of the 60 species figured, four are illustrated here for the first time (*Gentiana catesbaei* Walt., *Solidago odora* Ait., *Statice caroliniana* Walt. [= *Limonium carolinianum* (Walt.) Britton] and *Polygala rubella* Willd. [= *P. polygama* Walt.]).

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